TABLE OF CONTENTS, Volume 72, 1991

NUMBER 1, FEBRUARY

Articles

GRAUMLICH, L. J. Subalpine tree growth, climate, and increasing CO_2: an assessment of recent growth trends 1–11

BAZZAZ, F. A., AND W. E. WILLIAMS. Atmospheric CO_2 concentrations within a mixed forest: implications for seedling growth 12–16

HERBERT, T. J. Variation in interception of the direct solar beam by top canopy layers 17–22

EZCURRA, E., C. MONTAÑA, AND S. ARIZAGA. Architecture, light interception, and distribution of *Larrea* species in the Monte Desert, Argentina 23–34

WELDEN, C. W., S. W. HEWETT, S. P. HUBBELL, AND R. B. FOSTER. Sapling survival, growth, and recruitment: relationship to canopy height in a neotropical forest 35–50

DELUCIA, E. H., AND W. H. SCHLESINGER. Resource-use efficiency and drought tolerance in adjacent Great Basin and Sierran plants 51–58

HOBBS, R. J., AND H. A. MOONEY. Effects of rainfall variability and gopher disturbance on serpentine annual grassland dynamics 59–68

ALPERT, P. Nitrogen sharing among ramets increases clonal growth in *Fragaria chiloensis* 69–80

CARACO, T., AND C. K. KELLY. On the adaptive value of physiological integration in clonal plants 81–93

MCCONNAUGHAY, K. D. M., AND F. A. BAZZAZ. Is physical space a soil resource? 94–103

SWANK, S. E., AND W. C. OECHEL. Interactions among the effects of herbivory, competition, and resource limitation on chaparral herbs 104–115

REICHMAN, O. J., AND S. C. SMITH. Responses to simulated leaf and root herbivory by a biennial, *Tragopogon dubius* 116–124

BERTNESS, M. D. Interspecific interactions among high marsh perennials in a New England salt marsh 125–137

BERTNESS, M. D. Zonation of *Spartina patens* and *Spartina alterniflora* in a New England salt marsh 138–148

REAL, L. A., AND B. J. RATHCKE. Individual variation in nectar production and its effects on fitness in *Kalmia latifolia* 149–155

DYER, F. C., AND T. D. SEELEY. Nesting behavior and the evolution of worker tempo in four honey bee species 156–170

WASER, N. M., AND M. V. PRICE. Outcrossing distance effects in *Delphinium nelsonii*: pollen loads, pollen tubes, and seed set 171–179

LOISELLE, B. A., AND J. G. BLAKE. Temporal variation in birds and fruits along an elevational gradient in Costa Rica 180–193

JOHNSON, E. A., AND C. P. S. LARSEN. Climatically induced change in fire frequency in the southern Canadian Rockies 194–201

CWYNAR, L. C., AND R. W. SPEAR. Reversion of forest to tundra in the central Yukon 202–212

VEBLEN, T. T., K. S. HADLEY, M. S. REID, AND A. J. REBERTUS. The response of subalpine forests to spruce beetle outbreak in Colorado 213–231

POWER, A. G. Virus spread and vector dynamics in genetically diverse plant populations 232–241

NADELHOFFER, K. J., A. E. GIBLIN, G. R. SHAVER, AND J. A. LAUNDRE. Effects of temperature and substrate quality on element mineralization in six arctic soils 242–253

QUALLS, R. G., B. L. HAINES, AND W. T. SWANK. Fluxes of dissolved organic nutrients and humic substances in a deciduous forest 254–266
MATSUDA, H., AND T. NAMBA. Food web graph of a coevolutionarily stable community 267–276
CARPENTER, S. R., AND P. R. LEAVITT. Temporal variation in a paleolimnological record arising from a trophic cascade 277–285
DITTMAN, D., AND C. ROBLES. Effect of algal epiphytes on the mussel *Mytilus californianus* 286–296
DUDLEY, T. L., AND C. M. D'ANTONIO. The effects of substrate texture, grazing, and disturbance on macroalgal establishment in streams 297–309
HELFMAN, G. S., AND D. L. WINKELMAN. Energy trade-offs and foraging mode choice in American eels 310–318
PIEROTTI, R., AND C. A. ANNETT. Diet choice in the Herring Gull: constraints imposed by reproductive and ecological factors 319–328
ABRAMSKY, Z., M. L. ROSENZWEIG, AND B. PINSHOW. The shape of a gerbil isocline measured using principles of optimal habitat selection..... 329–340
GROSSMAN, G. D., D. M. NICKERSON, AND M. C. FREEMAN. Principal component analyses of assemblage structure data: utility of tests based on eigenvalues 341–347

Notes and Comments

STRAYER, D. Notes on Lindeman's progressive efficiency..... 348–350
BELL, S. S. Amphipods as insect equivalents? An alternative view..... 350–354
DUFFY, J. E., AND M. E. HAY. Amphipods are not all created equal: a reply to Bell 354–358

Reviews 359–368

NUMBER 2, APRIL

Special Report

LUBCHENCO, J., A. M. OLSON, L. B. BRUBAKER, S. R. CARPENTER, M. J. HOLLAND, S. P. HUBBELL, S. A. LEVIN, J. A. MACMAHON, P. A. MATSON, J. M. MELILLO, H. A. MOONEY, C. H. PETERSON, H. R. PULLIAM, L. A. REAL, P. J. REGAL, AND P. G. RISSER

The Sustainable Biosphere Initiative: an ecological research agenda 371–412

Articles

ROWE, L., AND D. LUDWIG. Size and timing of metamorphosis in complex life cycles: time constraints and variation 413–427
MARZLUFF, J. M., AND K. P. DIAL. Life history correlates of taxonomic diversity 428–439
UNGER, P. A., AND W. M. LEWIS, JR. Population ecology of a pelagic fish, *Xenomelaniris venezuelae* (Atherinidae), in Lake Valencia, Venezuela 440–456
GOTELLI, N. J. Demographic models for *Leptogorgia virgulata*, a shallow-water gorgonian..... 457–467
TESSIER, A. J., AND N. L. CONSOLATTI. Resource quantity and offspring quality in *Daphnia* 468–478
WIENS, J. A. Ecological similarity of shrub-desert avifaunas of Australia and North America 479–495
SEDINGER, J. S., AND P. L. FLINT. Growth rate is negatively correlated with hatch date in Black Brant..... 496–502
COOCH, E. G., D. B. LANK, A. DZUBIN, R. F. ROCKWELL, AND F. COOKE. Body size variation in Lesser Snow Geese: environmental plasticity in gosling growth rates 503–512
WARD, D. The size selection of clams by African Black Oystercatchers and Kelp Gulls..... 513–522

HESTBECK, J. B., J. D. NICHOLS, AND R. A. MALECKI. Estimates of movement and site fidelity using mark–resight data of wintering Canada Geese 523–533
CHRISTENSEN, K. M., AND T. G. WHITHAM. Indirect herbivore mediation of avian seed dispersal in pinyon pine 534–542
STRAUSS, S. Y. Direct, indirect, and cumulative effects of three native herbivores on a shared host plant 543–558
DWYER, G. The roles of density, stage, and patchiness in the transmission of an insect virus 559–574
KALISZ, S. Experimental determination of seed bank age structure in the winter annual *Collinsia verna* 575–585
MIAO, S.-L., F. A. BAZZAZ, AND R. B. PRIMACK. Effects of maternal nutrient pulse on reproduction of two colonizing *Plantago* species 586–596
ZIMMERMAN, J. K. Ecological correlates of labile sex expression in the orchid *Catasetum viridiflavum* 597–608
TAPPEINER, J. C., II, J. C. ZASADA, P. RYAN, AND M. NEWTON. Salmonberry clonal and population structure: the basis for a persistent cover 609–618
SIROIS, L., AND S. PAYETTE. Reduced postfire tree regeneration along a boreal forest–forest-tundra transect in northern Québec 619–627
HALL, F. G., D. B. BOTKIN, D. E. STREBEL, K. D. WOODS, AND S. J. GOETZ. Large-scale patterns of forest succession as determined by remote sensing .. 628–640
JACKSON, S. T., AND D. R. WHITEHEAD. Holocene vegetation patterns in the Adirondack Mountains 641–653
COLLINS, S. L., AND S. M. GLENN. Importance of spatial and temporal dynamics in species regional abundance and distribution 654–664
SETÄLÄ, H., AND V. HUHTA. Soil fauna increase *Betula pendula* growth: laboratory experiments with coniferous forest floor 665–671
SCHIMEL, D. S., T. G. F. KITTEL, A. K. KNAPP, T. R. SEASTEDT, W. J. PARTON, AND V. B. BROWN. Physiological interactions along resource gradients in a tallgrass prairie 672–684
TILMAN, G. D., AND D. A. WEDIN. Plant traits and resource reduction for five grasses growing on a nitrogen gradient 685–700
DEL ARCO, J. M., A. ESCUDERO, AND M. V. GARRIDO. Effects of site characteristics on nitrogen retranslocation from senescing leaves 701–708
CHAPIN, F. S., III, AND L. MOILANEN. Nutritional controls over nitrogen and phosphorus resorption from Alaskan birch leaves 709–715
KEELEY, J. E., AND D. R. SANDQUIST. Diurnal photosynthesis cycle in CAM and non-CAM seasonal-pool aquatic macrophytes 716–727
KNIGHT, S. E., AND T. M. FROST. Bladder control in *Utricularia macrorhiza*: lake-specific variation in plant investment in carnivory 728–734

Notes and Comments

HERMY, M., AND P. J. LEWI. Multivariate ratio analysis, a graphical method for ecological ordination 735–739
MEYER, S. E., AND S. B. MONSEN. Habitat-correlated variation in mountain big sagebrush (*Artemisia tridentata* ssp. *vaseyana*) seed germination patterns .. 739–742
HUGHES, F., P. M. VITOUSEK, AND T. TUNISON. Alien grass invasion and fire in the seasonal submontane zone of Hawai'i 743–747
WELLER, D. E. The self-thinning rule: dead or unsupported?—a reply to Lonsdale 747–750
FAJER, E. D., M. D. BOWERS, AND F. A. BAZZAZ. The effects of enriched CO_2 atmospheres on the buckeye butterfly, *Junonia coenia* 751–754
PATRICK, M. J. Distribution of enteric helminths in *Glaucomys volans* L. (Sciuridae): a test for competition 755–758

Reviews 759–770

NUMBER 3, JUNE

Articles

WASER, P. M., AND W. T. JONES. Survival and reproductive effort in banner-tailed kangaroo rats 771–777
RESETARITS, W. J., JR., AND H. M. WILBUR. Calling site choice by *Hyla chrysoscelis*: effect of predators, competitors, and oviposition sites 778–786
BELETSKY, L. D., AND G. H. ORIANS. Effects of breeding experience and familiarity on site fidelity in female Red-winged Blackbirds 787–796
AMUNDSEN, T., AND T. SLAGSVOLD. Asynchronous hatching in the Pied Flycatcher: an experiment 797–804
CHOQUENOT, D. Density-dependent growth, body condition, and demography in feral donkeys: testing the food hypothesis 805–813
KORPIMÄKI, E., AND K. NORRDAHL. Numerical and functional responses of Kestrels, Short-eared Owls, and Long-eared Owls to vole densities 814–826
FAUTH, J. E., AND W. J. RESETARITS, JR. Interactions between the salamander *Siren intermedia* and the keystone predator *Notophthalmus viridescens* 827–838
TIEBOUT, H. M., III. Daytime energy management by tropical hummingbirds: responses to foraging constraint 839–851
THOMPSON, D. B., J. H. BROWN, AND W. D. SPENCER. Indirect facilitation of granivorous birds by desert rodents: experimental evidence from foraging patterns 852–863
HEMPHILL, N. Disturbance and variation in competition between two stream insects 864–872
RICHARDSON, J. S. Seasonal food limitation of detritivores in a montane stream: an experimental test 873–887
CARTAR, R. V. A test of risk-sensitive foraging in wild bumble bees 888–895
HASTINGS, A., AND T. POWELL. Chaos in a three-species food chain 896–903
PACE, M. L., AND E. FUNKE. Regulation of planktonic microbial communities by nutrients and herbivores 904–914
KIRK, K. L. Inorganic particles alter competition in grazing plankton: the role of selective feeding 915–923
MACISAAC, H. J., AND J. J. GILBERT. Discrimination between exploitative and interference competition between Cladocera and *Keratella cochlearis* 924–937
STENECK, R. S., S. D. HACKER, AND M. N. DETHIER. Mechanisms of competitive dominance between crustose coralline algae: an herbivore-mediated competitive reversal 938–950
PRINGLE, C. M., AND F. J. TRISKA. Effects of geothermal groundwater on nutrient dynamics of a lowland Costa Rican stream 951–965
MULHOLLAND, P. J., A. D. STEINMAN, A. V. PALUMBO, J. W. ELWOOD, AND D. B. KIRSCHTEL. Role of nutrient cycling and herbivory in regulating periphyton communities in laboratory streams 966–982
CAPONE, T. A., AND J. A. KUSHLAN. Fish community structure in dry-season stream pools 983–992
ASHMAN, T.-L., AND M. L. STANTON. Seasonal variation in pollination dynamics of sexually dimorphic *Sidalcea oregana* ssp. *spicata* (Malvaceae) 993–1003
DUDASH, M. R. Plant size effects on female and male function in hermaphroditic *Sabatia angularis* (Gentianaceae) 1004–1012
FOX, J. F., AND G. C. STEVENS. Costs of reproduction in a willow: experimental responses vs. natural variation 1013–1023
FACELLI, J. M., AND S. T. A. PICKETT. Plant litter: light interception and effects on an old-field plant community 1024–1031
BOWERS, M. A., AND C. F. SACCHI. Fungal mediation of a plant–herbivore interaction in an early successional plant community 1032–1037
TILMAN, G. D., AND D. A. WEDIN. Dynamics of nitrogen competition between successional grasses 1038–1049

WILSON, S. D., AND G. D. TILMAN. Components of plant competition along an experimental gradient of nitrogen availability 1050–1065
DE STEVEN, D. Experiments on mechanisms of tree establishment in old-field succession: seedling emergence 1066–1075
DE STEVEN, D. Experiments on mechanisms of tree establishment in old-field succession: seedling survival and growth 1076–1088
RYDIN, H., AND S. BORGEGÅRD. Plant characteristics over a century of primary succession on islands: Lake Hjälmaren 1089–1101
CLARK, J. S. Disturbance and tree life history on the shifting mosaic landscape 1102–1118
CLARK, J. S. Disturbance and population structure on the shifting mosaic landscape 1119–1137
HARRINGTON, G. N. Effects of soil moisture on shrub seedling survival in a semi-arid grassland 1138–1149

Notes and Comments

MACDONALD, G. M., R. P. BEUKENS, AND W. E. KIESER. Radiocarbon dating of limnic sediments: a comparative analysis and discussion 1150–1155
BETHKE, R. W. Seasonality and interspecific competition in waterfowl guilds—a comment 1155–1158
DUBOWY, P. J. Seasonality and interspecific competition in waterfowl guilds: patterns and processes—a reply to Bethke 1159–1161
COHEN, Y., AND J. PASTOR. The responses of a forest model to serial correlations of global warming 1161–1165
CLARK, J. S. Forest-tree growth rates and probability of gap origin—a comment 1166–1169

Reviews 1170–1177

NUMBER 4, AUGUST

Special Feature—Behavior in Changing Environments

GORDON, D. M., AND P. A. MATSON. Interactions of behavioral and evolutionary ecology in changing environments 1179
GROSS, M. R. Salmon breeding behavior and life history evolution in changing environments 1180–1186
CHESSON, P. L., AND M. L. ROSENZWEIG. Behavior, heterogeneity, and the dynamics of interacting species 1187–1195
GORDON, D. M. Variation and change in behavioral ecology 1196–1203

Articles

ANDREWS, R. M. Population stability of a tropical lizard 1204–1217
DESLIPPE, R. J., AND R. T. M'CLOSKEY. An experimental test of mate defense in an iguanid lizard (*Sceloporus graciosus*) 1218–1224
SINERVO, B., AND J. B. LOSOS. Walking the tight rope: arboreal sprint performance among *Sceloporus occidentalis* lizard populations 1225–1233
BJORNDAL, K. A. Diet mixing: nonadditive interactions of diet items in an omnivorous freshwater turtle 1234–1241
ABRAMS, P. A. Life history and the relationship between food availability and foraging effort 1242–1252
TURCHIN, P. B. Translating foraging movements in heterogeneous environments into the spatial distribution of foragers 1253–1266
LECLERC, J. Optimal foraging strategy of the sheet-web spider *Lepthyphantes flavipes* under perturbation 1267–1272

LEONARDSSON, K. Effects of cannibalism and alternative prey on population dynamics of *Saduria entomon* (Isopoda) 1273–1285
DUFFY, J. E., AND M. E. HAY. Food and shelter as determinants of food choice by an herbivorous marine amphipod 1286–1298
STEINMAN, A. D., P. J. MULHOLLAND, A. V. PALUMBO, T. F. FLUM, AND D. L. DEANGELIS. Resilience of lotic ecosystems to a light-elimination disturbance 1299–1313
HINCH, S. G., N. C. COLLINS, AND H. H. HARVEY. Relative abundance of littoral zone fishes: biotic interactions, abiotic factors, and postglacial colonization 1314–1324
ROTENBERRY, J. T., AND J. A. WIENS. Weather and reproductive variation in shrubsteppe sparrows: a hierarchical analysis 1325–1335
MØLLER, A. P. Clutch size, nest predation, and distribution of avian unequal competitors in a patchy environment 1336–1349
DANELL, K., L. EDENIUS, AND P. LUNDBERG. Herbivory and tree stand composition: moose patch use in winter 1350–1357
FOSTER, J., AND M. S. GAINES. The effects of a successional habitat mosaic on a small mammal community 1358–1373
HOBBS, N. T., D. S. SCHIMEL, C. E. OWENSBY, AND D. S. OJIMA. Fire and grazing in the tallgrass prairie: contingent effects on nitrogen budgets 1374–1382
DUSSOURD, D. E., AND R. F. DENNO. Deactivation of plant defense: correspondence between insect behavior and secretory canal architecture 1383–1396
DOAK, D. F. The consequences of herbivory for dwarf fireweed: different time scales, different morphological scales 1397–1407
JOHNSON, R. A. Learning, memory, and foraging efficiency in two species of desert seed-harvester ants 1408–1419
VIA, S. Specialized host plant performance of pea aphid clones is not altered by experience 1420–1427
NITAO, J. K., M. P. AYRES, R. C. LEDERHOUSE, AND J. M. SCRIBER. Larval adaptation to lauraceous hosts: geographic divergence in the spicebush swallowtail butterfly 1428–1435
HERRERA, C. M. Dissecting factors responsible for individual variation in plant fecundity 1436–1448
WALKER, L. R., AND P. M. VITOUSEK. An invader alters germination and growth of a native dominant tree in Hawai'i 1449–1455
PIEDADE, M. T. F., W. J. JUNK, AND S. P. LONG. The productivity of the C_4 grass *Echinochloa polystachya* on the Amazon floodplain 1456–1463
YOUNG, T. P., AND S. P. HUBBELL. Crown asymmetry, treefalls, and repeat disturbance of broad-leaved forest gaps 1464–1471
DYER, M. I., M. A. ACRA, G. M. WANG, D. C. COLEMAN, D. W. FRECKMAN, S. J. MCNAUGHTON, AND B. R. STRAIN. Source–sink carbon relations in two *Panicum coloratum* ecotypes in response to herbivory 1472–1483
CALLAWAY, R. M., N. M. NADKARNI, AND B. E. MAHALL. Facilitation and interference of *Quercus douglasii* on understory productivity in central California 1484–1499

Notes and Comments

JOHNSTON, M. O. Pollen limitation of female reproduction in *Lobelia cardinalis* and *L. siphilitica* 1500–1503
WILSON, P., AND J. D. THOMSON. Heterogeneity among floral visitors leads to discordance between removal and deposition of pollen 1503–1507
PUBLICOVER, D. A., AND K. A. VOGT. Canopy stereogeometry of non-gaps in tropical forests—a comment 1507–1510
WILLIAMS, M. R., AND I. ABBOTT. Quantifying average defoliation using leaf-level measurements 1510–1511
PALMER, M. W. Estimating species richness: the second-order jackknife reconsidered 1512–1513

LINK, W. A., AND B. A. HOOVER. The detection of density-dependence from a series of annual censuses—a comment 1514–1515
WATTS, B. D. Effects of predation risk on distribution within and between habitats in Savannah Sparrows 1515–1519

Reviews 1520–1528

NUMBER 5, OCTOBER

Articles

WALKER, E. D., D. L. LAWSON, R. W. MERRITT, W. T. MORGAN, AND M. J. KLUG. Nutrient dynamics, bacterial populations, and mosquito productivity in tree hole ecosystems and microcosms 1529–1546
NEWELL, S. Y., AND R. D. FALLON. Toward a method for measuring instantaneous fungal growth rates in field samples 1547–1559
SIEMENS, D. H., C. D. JOHNSON, AND R. L. WOODMAN. Determinants of host range in bruchid beetles 1560–1566
BARBOSA, P., P. GROSS, AND J. KEMPER. Influence of plant allelochemicals on the tobacco hornworm and its parasitoid, *Cotesia congregata* 1567–1575
HARE, J. D., AND R. F. LUCK. Indirect effects of citrus cultivars on life history parameters of a parasitic wasp 1576–1585
LOADER, C., AND H. DAMMAN. Nitrogen content of food plants and vulnerability of *Pieris rapae* to natural enemies 1586–1590
WALDE, S. J. Patch dynamics of a phytophagous mite population: effect of number of subpopulations 1591–1598
AUERBACH, M. Relative impact of interactions within and between trophic levels during an insect outbreak 1599–1608
NICHOLS-ORIANS, C. M. Environmentally induced differences in plant traits: consequences for susceptibility to a leaf-cutter ant 1609–1623
DANELL, K., P. NIEMELÄ, T. VARVIKKO, AND T. VUORISALO. Moose browsing on Scots pine along a gradient of plant productivity 1624–1633
MIAO, S.-L., F. A. BAZZAZ, AND R. B. PRIMACK. Persistence of maternal nutrient effects in *Plantago major*: the third generation 1634–1642
WRIGHT, S. J. Seasonal drought and the phenology of understory shrubs in a tropical moist forest 1643–1657
SHIPLEY, B., P. A. KEDDY, C. GAUDET, AND D. R. J. MOORE. A model of species density in shoreline vegetation 1658–1667
CHAMBERS, J. C., J. A. MACMAHON, AND J. H. HAEFNER. Seed entrapment in alpine ecosystems: effects of soil particle size and diaspore morphology 1668–1677
WESTMAN, W. E. Measuring realized niche spaces: climatic response of chaparral and coastal sage scrub 1678–1684
BETANCOURT, J. L., W. S. SCHUSTER, J. B. MITTON, AND R. S. ANDERSON. Fossil and genetic history of a pinyon pine (*Pinus edulis*) isolate 1685–1697
PELTONEN, A., AND I. HANSKI. Patterns of island occupancy explained by colonization and extinction rates in shrews 1698–1708
WERNER, E. E. Nonlethal effects of a predator on competitive interactions between two anuran larvae 1709–1720
TONKYN, D. W., AND J. H. PLISSNER. Models of multiple dispersers from the nest: predictions and inference 1721–1730
GASCON, C. Population- and community-level analyses of species occurrences of central Amazonian rainforest tadpoles 1731–1746
VAN BUSKIRK, J., AND D. C. SMITH. Density-dependent population regulation in a salamander 1747–1756
NILSSON, J. Clutch size determination in the Marsh Tit (*Parus palustris*) 1757–1762
SCHLUTER, D., AND R. R. REPASKY. Worldwide limitation of finch densities by food and other factors 1763–1774

FOWLER, A. C., R. L. KNIGHT, T. L. GEORGE, AND L. C. MCEWEN. Effects of avian predation on grasshopper populations in North Dakota grasslands ... 1775–1781
RESETARITS, W. J., JR. Ecological interactions among predators in experimental stream communities ... 1782–1793
KENNY, D. A., AND C. LOEHLE. Are food webs randomly connected? ... 1794–1799
FELTMATE, B. W., AND D. D. WILLIAMS. Evaluation of predator-induced stress on field populations of stoneflies (Plecoptera) ... 1800–1806
NORTON, S. F. Capture success and diet of cottid fishes: the role of predator morphology and attack kinematics ... 1807–1819
DEMOTT, W. R., AND F. MOXTER. Foraging on cyanobacteria by copepods: responses to chemical defenses and resource abundance ... 1820–1834
MCCORMICK, P. V., AND R. J. STEVENSON. Mechanisms of benthic algal succession in lotic environments ... 1835–1848
MCFADDEN, C. S. A comparative demographic analysis of clonal reproduction in a temperate soft coral ... 1849–1866
MINCHINTON, T. E., AND R. E. SCHEIBLING. The influence of larval supply and settlement on the population structure of barnacles ... 1867–1879
TROWBRIDGE, C. D. Diet specialization limits herbivorous sea slug's capacity to switch among food species ... 1880–1888

Notes and Comments

GERRODETTE, T. Models for power of detecting trends—a reply to Link and Hatfield ... 1889–1892
BYRD, J. W., A. I. HOUSTON, AND P. D. SOZOU. Ydenberg's model of fledging time—a comment ... 1893–1896
GOWER, S. T., AND J. M. NORMAN. Rapid estimation of leaf area index in conifer and broad-leaf plantations ... 1896–1900
LIEBERMAN, M., AND D. LIEBERMAN. No matter how you slice it—a reply to Publicover and Vogt ... 1900–1902

Reviews ... 1903–1916

NUMBER 6, DECEMBER

Special Feature—Remote Sensing

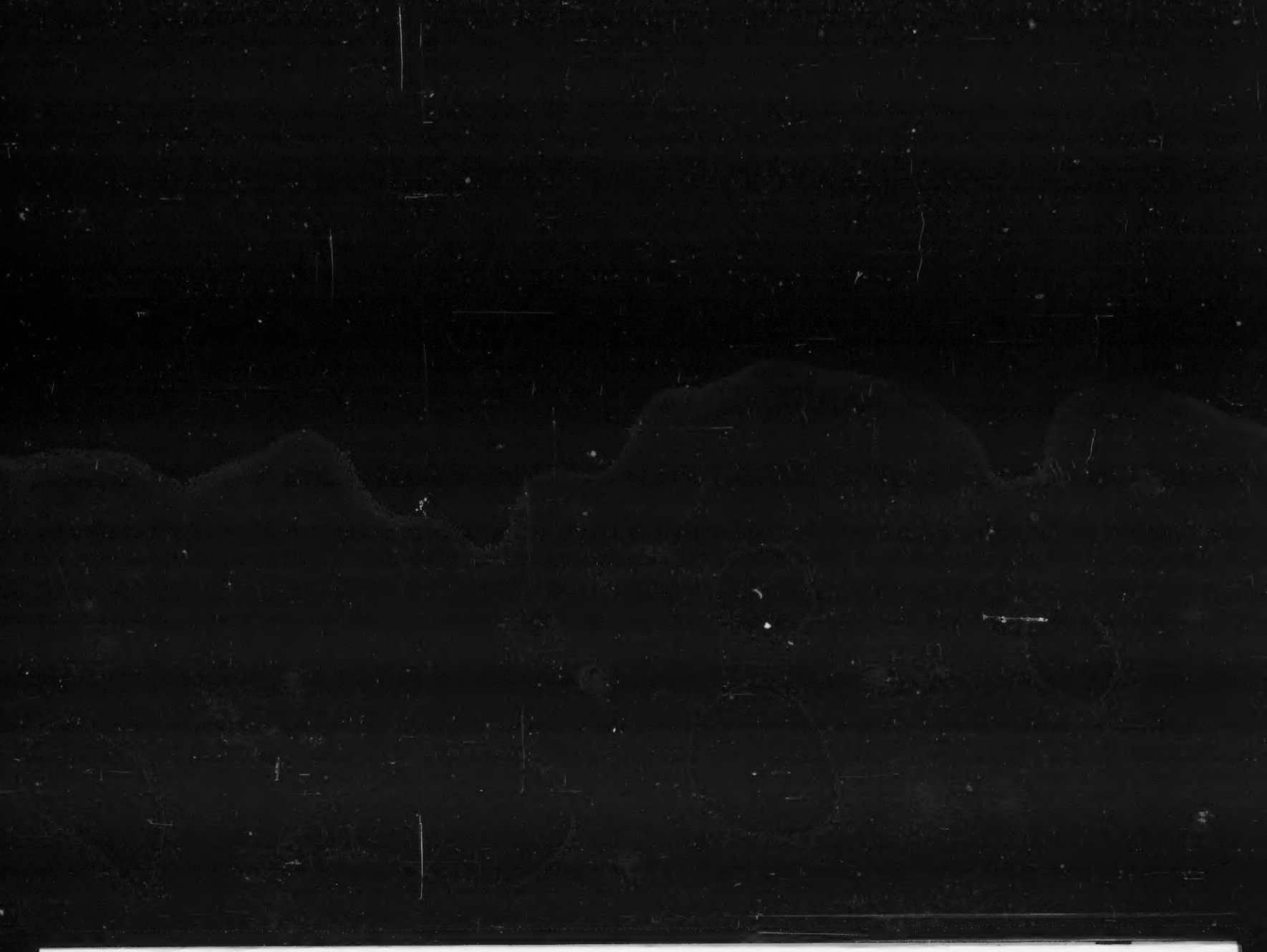
MATSON, P. A., AND S. L. USTIN. The future of remote sensing in ecological studies ... 1917
ROUGHGARDEN, J., S. W. RUNNING, AND P. A. MATSON. What does remote sensing do for ecology? ... 1918–1922
WICKLAND, D. E. Mission to Planet Earth: the ecological perspective ... 1923–1933
USTIN, S. L., C. A. WESSMAN, B. CURTISS, E. KASISCHKE, J. WAY, AND V. C. VANDERBILT. Opportunities for using the EOS imaging spectrometers and synthetic aperture radar in ecological models ... 1934–1945

Articles

FEINSINGER, P., AND H. M. TIEBOUT, III. Competition among plants sharing hummingbird pollinators: laboratory experiments on a mechanism ... 1946–1952
FEINSINGER, P., H. M. TIEBOUT, III, AND B. E. YOUNG. Do tropical bird-pollinated plants exhibit density-dependent interactions? Field experiments ... 1953–1963
STONE, L., AND A. ROBERTS. Conditions for a species to gain advantage from the presence of competitors ... 1964–1972
POTVIN, C., AND C. CHAREST. Maternal effects of temperature on metabolism in the C_4 weed *Echinochloa crus-galli* ... 1973–1979
BERGERON, Y. The influence of island and mainland lakeshore landscapes on boreal forest fire regimes ... 1980–1992

MORENO, J. M., AND W. C. OECHEL. Fire intensity effects on germination of shrubs and herbs in southern California chaparral 1993–2004
GARTNER, B. L. Structural stability and architecture of vines vs. shrubs of poison oak, *Toxicodendron diversilobum* 2005–2015
MCLENDON, T., AND E. F. REDENTE. Nitrogen and phosphorus effects on secondary succession dynamics on a semi-arid sagebrush site 2016–2024
SANTELMANN, M. V. Influences on the distribution of *Carex exilis*: an experimental approach 2025–2037
PRENTICE, I. C., P. J. BARTLEIN, AND T. WEBB, III. Vegetation and climate change in eastern North America since the last glacial maximum 2038–2056
CORNELIUS, J. M., AND J. F. REYNOLDS. On determining the statistical significance of discontinuities within ordered ecological data 2057–2070
NADKARNI, N. M., AND T. J. MATELSON. Fine litter dynamics within the tree canopy of a tropical cloud forest 2071–2082
WALBRIDGE, M. R. Phosphorus availability in acid organic soils of the lower North Carolina coastal plain 2083–2100
JAMES, S. W. Soil, nitrogen, phosphorus, and organic matter processing by earthworms in tallgrass prairie 2101–2109
OHGUSHI, T. Lifetime fitness and evolution of reproductive pattern in the herbivorous lady beetle 2110–2122
TRAVERS, S. E., AND A. SIH. The influence of starvation and predators on the mating behavior of a semiaquatic insect 2123–2136
CAIN, M. L. When do treatment differences in movement behaviors produce observable differences in long-term displacements? 2137–2142
STILING, P. D., A. THROCKMORTON, J. SILVANIMA, AND D. R. STRONG, JR. Does spatial scale affect the incidence of density dependence? A field test with insect parasitoids 2143–2154
POSEY, M. H., AND A. H. HINES. Complex predator–prey interactions within an estuarine benthic community 2155–2169
PERLMUTTER, D. G., AND J. L. MEYER. The impact of a stream-dwelling harpacticoid copepod upon detritally associated bacteria 2170–2180
NORTON, S. F. Habitat use and community structure in an assemblage of cottid fishes 2181–2192
TROWBRIDGE, C. D. Group membership facilitates feeding of the herbivorous sea slug *Placida dendritica* 2193–2203
SYDEMAN, W. J., H. R. HUBER, S. D. EMSLIE, C. A. RIBIC, AND N. NUR. Age-specific weaning success of northern elephant seals in relation to previous breeding experience 2204–2217
FRAZER, N. B., J. W. GIBBONS, AND J. L. GREENE. Life history and demography of the common mud turtle *Kinosternon subrubrum* in South Carolina, USA 2218–2231
SREDL, M. J., AND J. P. COLLINS. The effect of ontogeny on interspecific interactions in larval amphibians 2232–2239
PFENNIG, D. W., A. MABRY, AND D. ORANGE. Environmental causes of correlations between age and size at metamorphosis in *Scaphiopus multiplicatus* 2240–2248
KOTLER, B. P., J. S. BROWN, AND O. HASSON. Factors affecting gerbil foraging behavior and rates of owl predation 2249–2260
LONGLAND, W. S., AND M. V. PRICE. Direct observations of owls and heteromyid rodents: can predation risk explain microhabitat use? 2261–2273
REPASKY, R. R. Temperature and the northern distributions of wintering birds 2274–2285

Notes and Comments

HALL, R. B. W. A re-examination of the use of interpoint distances and least squares in mapping forest trees 2286–2289
HUTCHINGS, M. J., K. D. BOOTH, AND S. WAITE. Comparison of survivorship by the logrank test: criticisms and alternatives 2290–2293
FRY, B. Stable isotope diagrams of freshwater food webs 2293–2297

Reviews 2298–2305
Errata 22, 1419, 1483
Ad Hoc Editors of Manuscripts 2306
Reviewers of Manuscripts 2306–2312
Index for Volume 72
Author Index 2313–2315
Key Word Index 2316–2326
Book Review Index 2327–2330